



The NEW ISIS v.3.

(Integrated Survey Information System)

More Than a PDA Survey Tool

Addressing the needs of the future

2005 National CAPS Meeting

Nashville, TN

December 7, 2005

A Status Report from the ISIS Steering Committee

Bob Balaam, USDA APHIS PPQ



Emergency and Pest Detection

Current PPQ Programs – Survey Oriented

Data Management Systems

Program	DBMS	Name
Boll weevil	Oracle	Boll Weevil Eradication Expert System
Citrus canker	Oracle	Pest Incident Control System (PICS)
ALB and EAB	Oracle	Emergency Response Information System (ERIS)
Fruit flies	NAPIS (ADABASE)	No stand alone system; state/federal cooperative systems
Karnal bunt	Lotus Notes	Karnal Bunt Information System (KBIS)
Pest detection	ADABASE	National Agricultural Pest Information System (NAPIS)
Plum pox	MS Access	
<i>Ralstonia</i>	MS Excel & Lotus Notes EAN	

Emergency and Pest Detection

Current PPQ Programs – Survey Oriented

Data Management Systems

Program	DBMS	Name
<i>Phytophthora ramorum</i>	MS Access (2004) NAPIS (2005)	
GWSS	SQL Server	Glassy winged sharpshooter
Laboratory samples	Planned to be compatible with Oracle/SQL	Laboratory Information System (LIMS)
CPHST	Multiple	Decision support and risk analysis, spatial analysis, and GIS
Multiple use	SQL Server	Integrated Survey Information System (ISIS v.3)
New (?) – Citrus greening, <i>Sirex noctilio</i> , <i>Scirtothrips dorsalis</i> , next pest of the month		

PPQ Data Management Needs/Wants

A Single System (??)

- Don't reinvent the wheel
- Some commonality – “one shoe may not fit all”
- Software that is easy to use
- Software that is customizable
- Address cooperator needs
- Communicate with cooperator systems
- Data must be electronically transferable
- Accessibility and adaptability (decision making/mapping)
- Spatial analysis and GIS (SAGIS) interface
- Resource tracking
- Report capability – canned and ad hoc

Some Common Elements (Tables)

- Pest/disease
- Site (premises, establishment, field, inspection, survey)
- Crop/host
- Samples/specimens
- Regulatory action
- Inspection agent or work unit
- Resources (personnel, vehicles, equipment, etc.)

Some Common Elements (Tables)

cont'd

- Contracts
- Contacts/clients/stakeholders
- Bio-control agents
- Communications
- System or user security
- Weather
- Various lookup tables

What's on the Horizon

- APHIS-wide initiative: one Agency system for emergency programs.
- PPQ wants a system that can handle new pests as soon as they occur.
- Do we design a new system or use/modify an existing one?
- **The NEW** ISIS v.3 **may be ONE of SEVERAL available tools/options** that can help provide the solution.



The OLD

ISIS

vs.

The NEW

ISIS v.3

The OLD

- Problems with software, design, PDA, and reports.
 - “Bug” ridden.
 - Primarily a PDA survey tool.
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The NEW

- A whole new data management tool.
- Problems and bugs from old version have been fixed.
- Many new enhancements.

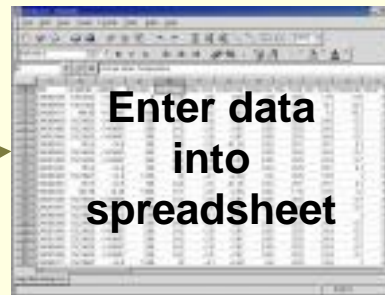
What is **The NEW** ISIS v.3?

- Old problems and new enhancements addressed by ISIS Steering Committee – HQ, ER, WR, CPHST reps.
- Two (2) part:
 - **Survey tool:** web-enabled and seamlessly integrated.
 - **Relational SQL server database:** on-line and off-line functionality.
- Data collected and transmitted from variety of field devices.
- Broad management accessibility for decision-making.
- Fully interoperable with other internal/external reporting tools and risk analysis systems.

What is **The NEW** ISIS v.3? (cont'd)

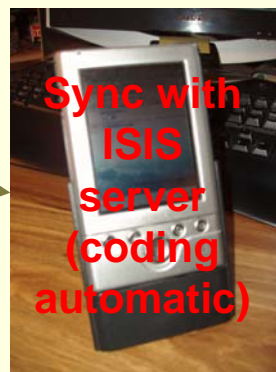
- Complies with APHIS IT standards.
- Collects and stores point data – compatible and easily merged with GIS mapping and analysis tools.
- Seamlessly updates and translates NAPIS codes for data transfer into NAPIS.
- Data stored in ISIS SQL server database is accessible for reports and program decision making.
- Standardized designs (survey forms).
- User customizable and shareable designs.





The Old Way Data Management

The New Way



The **NEW** ISIS v.3 System Design Templates

- Current System Design Templates:
 - Bark beetle – Visual survey
 - Bark beetle – Trap survey
 - Pine shoot beetle
 - Japanese beetle
 - Gypsy moth
 - Grasshopper
 - Sudden oak death
 - Soybean rust
 - Noxious weed

The NEW ISIS v.3 Custom Design Templates

- Work unit managers can now create and standardize templates for a new program at any time – even on day one of an emergency program – and push/share these designs with work unit users.
- Current User Generated Design Templates (Beta):
 - Saltcedar
 - Citrus greening
 - *Sirex noctilio*
 - Other?

The **NEW** ISIS v.3 Flexible and Adaptable

- Data administration at the regional level.
- User level security; data protection controls.
- PPQ and State cooperators can develop their own survey forms.
- Adaptable to future management needs and operational enhancements.
- Flexible for emergency and other programs.
- Point data compatible with ArcIMS server and mapping.
- PPQ owned and maintained.
- Data easily exported to other systems.
- Data transmission controlled by state authority.



Proposed Project Timeline

■ **Beta Testing:**

- Group 1: 10/18/05 – 12/05/05 (*initial reports are positive*)
- Group 2: 12/13/05 – 2/13/06

■ **Management Evaluation**

■ **If management approves** continued usage:

- **User Availability:** February 15, 2006
- **Training Sessions:** 2/22/06 – 4/28/06
- **Long Term Goal:**
 - Expanded optional usage for 2006 survey season
 - Widespread optional usage by 2007 survey season
- **ISO Certification:** CPHST asked to assist

ISIS v.3 Training Sessions

..... * *Available to PPQ and Cooperators*



■ ***PPQ Program managers***

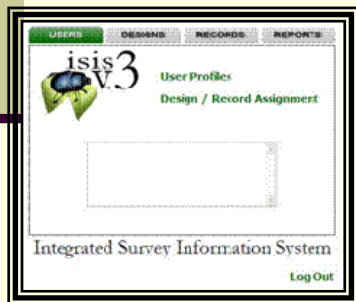
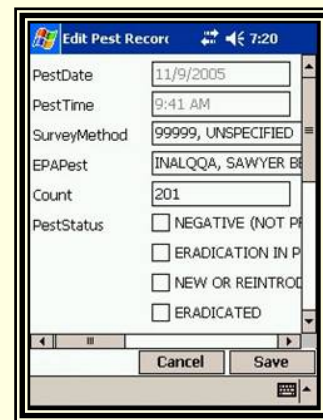
- Ft. Collins, CO Feb 22-23
- Riverdale, MD Feb 27-28
- Raleigh, NC Mar 2-3

■ ***Experienced field users*** *

- TBD/Minneapolis ... Mar 6-10

■ ***Beginner field users*** *

- Aurora, CO Mar 20-24
- Raleigh, NC Mar 27-31
- Houston, TX
or Phoenix, AZ Apr 3-7
- Raleigh, NC Apr 10-14
- St. Louis, MO Apr 24-28



The NEW ISIS v.3 Availability

- PPQ owned and developed.
- Offered to states and other PPQ cooperators for data collection and reporting needs.
- Available to cooperators without cost.
- Use of this technology by PPQ or cooperators is neither restricted nor required; it could be a tool in the toolbox.



Integrated Survey Information System

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